Claims

1   1.   A universal computer-aided design system comprising:

2   a computer-aided design neutral database having values within

3   addressable data cells;

4   a computer-aided design graphics platform operating on readable

5   formatted data unique to said platform;

6   an export routine capable of conveying the values within the data cells

7   to said platform as readable formatted data independent of translation; and

8   a computer capable of executing the export routine.

1   2.   The universal computer-aided design system of claim 1 further

2   comprising a plurality of said platforms and corresponding export routines

3   wherein each of said plurality of platforms is interactive with said database by

4   said corresponding export routine.

1   3.   The universal computer-aided design system of claim 1 wherein

2   a modification to the readable formatted data within said platform updates the

3   values in said database.

1   4.   The universal computer-aided design system of claim 1 wherein

2   said computer-aided design neutral database having values is arranged into a

3   part family, said part family comprising a part family member.

1   5.   The universal computer-aided design system of claim 1 further

2 comprising a query routine program prompting a user for input, said program

3 storing the input in the computer-aided design neutral database.

1   6.   The universal computer-aided design system of claim 4 where

2 said part family member is described by a parameter description having at least

3 one physical property selected from a group consisting of: size, shape, color,

4 material, and weight.

1   7.   The universal computer-aided design system of claim 5 wherein

2 said parameter description further comprises at least one information packet

3 selected from a group consisting of: part name, part number, price, inventory,

4 manufacturer, and a computer web link to the manufacturer.

1   8.   A universal computer-aided design system comprising:

2   a computer-aided design neutral database having values within

3 addressable data cells;

4   a plurality of computer-aided design graphics platforms each operating

5 on readable formatted data unique to said platform; and

6   a plurality of export routines, corresponding to said plurality of

7 computer-aided design graphics platforms wherein each of said plurality of

8 platforms is interactive with said database by said corresponding export

9 routine.

1   9.   The universal computer-aided design system of claim 8 wherein

2   a modification to the readable formatted data within said platform updates the

3   values in said database.

1   10.   The universal computer-aided design system of claim 8 wherein

2   said computer-aided design neutral database having values is arranged into a

3   part family, said part family comprising a part family member.

1   11.   The universal computer-aided design system of claim 8 further

2   comprising a query routine program prompting a user for input, said program

3   storing the input in the computer-aided design neutral database.

1   12.   The universal computer-aided design system of claim 11 where

2   said part family member is described by a parameter description having at least

3   one physical property selected from a group consisting of: size, shape, color,

4   material, and weight.

1   13.   The universal computer-aided design system of claim 12

2   wherein said parameter description further comprises at least one information

3   packet selected from a group consisting of: part name, part number, price,

4   inventory, manufacturer, and a computer web link to the manufacturer.

1   14.   A universal computer-aided design system comprising:

2   a computer-aided design neutral database having values within

3   addressable data cells;

4   a file created from said database in a computer-aided design neutral file

5   format;

6   a computer-aided design graphics platform operating on readable

7   formatted data unique to said platform;

8   an export routine capable of conveying the values within the file to said

9   platform as readable formatted data independent of translation;

10   an import routine capable of conveying values from the platform as

11   readable formatted data independent of translation; and

12   a computer capable of executing the export and import routines.

1   15.   A process for computer-aided design rendering comprising the

2   steps of:

3   storing values within addressable data cells of a computer-aided design

4   neutral database; and

5   delivering the values to one of a plurality of computer-aided design

6   graphics platforms in a format readable by one of said graphics platforms

7   independent of translation.

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1   16.   The process of claim 15 further comprising the step of updating

2   said computer-aided design neutral database from said computer-aided design

3   graphics platform.

1   17.   The process of claim 15 further comprising the step of

2   performing parametric modeling prior to updating said computer-aided design

3   database.

1   18.   The process of claim 15 wherein values stored within said

2   computer-aided design database are arranged into a part family, said part

3   family comprising a part family member.

1   19.   The use of a neutral database for exporting parameters to a first

2   graphics platform, said database receiving updated data from said first graphics

3   platform and displaying the updated data on a second disparate graphics

4   platform independent of translation.

1   20.   The use of a neutral database according to claim _____ wherein

2   said first and said second graphics platforms are computer-aided design

3   platforms.

1   21.   The process of claim 14 further comprising the step of inputting

2   data into said computer-aided design neutral database through supplying

3   information in response to a query routine program.